=> file medline biosis caplus agricola COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 1.61 1.82

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 07:57:42 ON 20 DEC 2002

FILE 'BIOSIS' ENTERED AT 07:57:42 ON 20 DEC 2002 COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'CAPLUS' ENTERED AT 07:57:42 ON 20 DEC 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'AGRICOLA' ENTERED AT 07:57:42 ON 20 DEC 2002

=> s prolactin and litter
L1 666 PROLACTIN AND LITTER

=> s prolactin (3a) receptor and litter

L2 33 PROLACTIN (3A) RECEPTOR AND LITTER

=> dup rem 12 PROCESSING COMPLETED FOR L2 L3 21 DUP REM L2 (12 DUPLICATES REMOVED)

=> d 1-21 ti

- L3 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2002 ACS
- TI **Prolactin receptor** gene polymorphic markers for increased **litter** size in animals
- L3 ANSWER 2 OF 21 MEDLINE DUPLICATE 1
- TI Litter size and piglet traits of gilts with different prolactin receptor genotypes.
- L3 ANSWER 3 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2
- TI A new HpaII PCR-RFLP within the porcine **prolactin** receptor (PRLR) gene and study of its effect on **litter** size and number of teats.
- L3 ANSWER 4 OF 21 MEDLINE DUPLICATE 3
- TI Candidate gene markers for litter size in different German pig lines.
- L3 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2002 ACS
- TI Genetic markers for reproductive traits in pigs
- L3 ANSWER 6 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 4
- TI Prolactin receptor gene polymorphism and its association with litter size in Polish Landrace.
- L3 ANSWER 7 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
- TI Neuroendocrinology of maternal behavior in the rabbit.
- L3 ANSWER 8 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
- TI Identification of genes related to reproductive traits in swine.
- L3 ANSWER 9 OF 21 MEDLINE

ΤI Candidate gene analysis for loci affecting litter size and ovulation rate in swine. L3 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2002 ACS Study on polymorphism of estrogen receptor (ESR), prolactin receptor (PRLR) and relationship between polymorphism and litter size in large white sow ANSWER 11 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE Genes for reproductive traits in pigs: A review. TIOriginal Title: Geny zwiazane z cechami rozrodu swin.. ANSWER 12 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. T.3 TΤ Effect of prolactin receptor (PRLR) gene polymorphism on litter size and placental traits in gilts. T. 3 ANSWER 13 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. ΤI Prolactin receptor gene as a genetic marker for increased litter size in pigs. ANSWER 14 OF 21 CAPLUS COPYRIGHT 2002 ACS T.3 Prolactin receptor gene AluI polymorphism as a genetic TImarker for increased litter size in pigs ANSWER 15 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. L3 TIA mutation in the prolactin receptor gene is associated with increased litter size in pigs. L3 ANSWER 16 OF 21 DUPLICATE 7 Lactogenic actions of different growth hormone preparations in pregnant TTand lactating rats. L3 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2002 ACS TI Dual modulation of prolactin release by the serotoninergic system in lactating rats L3ANSWER 18 OF 21 CAPLUS COPYRIGHT 2002 ACS Influence of prolactin and growth hormone on the activation of dwarf mouse TIlymphocytes in vivo L3ANSWER 19 OF 21 CAPLUS COPYRIGHT 2002 ACS TICorrelation between mammary prolactin receptors of lactating mice and litter weight L3 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2002 ACS TIRegulation of insulin receptors by prolactin in lactating rat mammary gland L3 ANSWER 21 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. GROWTH HORMONE AND INSULIN BINDING TO ISOLATED HEPATOCYTES IN THE TTGENETICALLY DWARF MOUSE. => d 1-3, 10-15 bib abANSWER 1 OF 21 CAPLUS COPYRIGHT 2002 ACS L32002:833383 CAPLUS ANDN 137:347485 TIProlactin receptor gene polymorphic markers for increased litter size in animals ΙN Rothschild, Max F.; Vincent, Amy L.; Tuggle, Christopher K.; Gladney,

Christy; Mileham, Alan; Southwood, Olwen; Plastow, Graham; Sargent, Carole

PA USA

SO U.S. Pat. Appl. Publ., 24 pp., Cont.-in-part of U.S. Ser. No. 274,655, abandoned.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

FAN. CNT Z				
PATENT I	NO. KIND	DATE	APPLICATION NO. DATE	
				-
PI US 2002	160372 A1	20021031	US 2001-900063 2001070	16
US 5935	784 A	19990810	US 1997-812208 1997030	6
US 5939	264 A	19990817	US 1997-896365 1997071	8.
PRAI US 1996	-22180P P	19960719		
US 1996	-742805 B1	19961101		
US 1997	-812208 A1	19970306		
US 1999	-274655 B2	19990323		

AB Disclosed herein are genetic markers for animal litter size, methods for identifying such markers, and methods of screening animals to det. those more likely to produce larger litters and preferably selecting those animals for future breeding purposes. The markers are based upon the presence or absence of certain polymorphisms in the prolactin receptor gene. In particular, genetic markers in swine prolactin receptor genes for larger pig litter size are provided in addn. to methods for identifying such markers for selecting pigs for breeding. These markers include polymorphic sites for several restriction endonuclease located between exon 8 and 9, or introns 3 and 4 and exon 4 of pig prolactin receptor gene.

L3 ANSWER 2 OF 21 MEDLINE

DUPLICATE 1

AN 2002251177 MEDLINE

DN 21986807 PubMed ID: 11991391

TI Litter size and piglet traits of gilts with different prolactin receptor genotypes.

AU van Rens Birgitte T T M; van der Lende Tette

CS Animal Breeding and Genetics Group, WIAS, Wageningen University, The Netherlands.. birgitte.vanrens@alg.vf.wag-ur.nl

SO THERIOGENOLOGY, (2002 Jan 15) 57 (2) 883-93. Journal code: 0421510. ISSN: 0093-691X.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200206

ED Entered STN: 20020507 Last Updated on STN: 20020628

Entered Medline: 20020627

Seventy-seven Large White x Meishan F2 crossbred gilts with AΒ prolactin receptor (PRLR) genotype AA (n = 26), AB (n = 36) and BB (n = 15) were compared for teat number (FTm), age at first estrus, gestation length (GL), litter size, and litter means of functional teat number (FTp), birthweight (BW), and pre-weaning growth rate (GR). Own placental information was available for 88% of 620 live-born piglets (62 gilts), since placentae were labeled during farrowing. The effect of PRLR genotype of the mother on average placenta weight (PLW) and placenta efficiency (EFF = BW/PLW), was therefore, also analyzed, PRLR genotype significantly (P < 0.05) affected age at first estrus and, as a result (since the gilts were inseminated at a fixed estrus number), age and bodyweight at insemination. Furthermore, PRLR genotype affected total number of piglets born (TNB, P = 0.056) and number of piglets born alive (NBA, P = 0.072), but it did not affect (P > 0.3) GL, BW or GR, neither before nor after correction for litter

size. BB gilts were significantly younger at first estrus and younger and lighter at insemination than AA gilts (P < 0.05). AA gilts had larger TNB (P = 0.047) and tended to have a larger NBA (P = 0.062) than BB gilts. TNB was 11.4 +/- 0.7, 10.8 +/- 0.6, and 8.8 +/- 0.9; NBA was 11.1 +/- 0.6, 10.5 +/- 0.6, and 8.7 +/- 0.9; BW was 1309 +/- 40, 1277 +/- 34, and 1290 +/- 53 g; and GL was 113.6 +/- 0.3, 113.8 +/- 0.3, and 113.5 +/- 0.4 days for AA, AB and BB gilts, respectively. The effects on litter size and age at first estrus are independent effects. PRLR affected PLW (P = 0.050) and EFF (P = 0.066), resulting in a difference between AA and BB gilts. PLW was 160 +/- 9, 181 +/- 7 and 196 +/- 11 g and EFF was 7.6 +/-0.2, 7.3 \pm 0.2 and 6.7 \pm 0.3 for AA (n = 19), AB (n = 29) and BB (n = 14) gilts, respectively. After correction for TNB, the differences disappeared. Functional teat number of the AA. AB and BB gilts was 15.35 +/- 0.22, 15.53 +/- 0.18, and 15.60 +/- 0.29, respectively, and was not affected by PRLR genotype (P = 0.7). Functional teat number of piglets from AA, AB and BB mothers was 14.20 +/- 0.10, 14.37 +/- 0.08, and 14.63+/- 0.13, respectively. Piglets from BB mothers had on average larger numbers of functional teats compared to piglets from AA mothers (P = 0.028). In conclusion, PRLR gene is a major gene or marker for age at first estrus, litter size, and litter average of number of functional teats in the Large White x Meishan F2 crossbred gilts studied. The favorable allele for litter size (A allele) is the unfavorable allele for age at first estrus and for litter mean of functional teat number.

- L3 ANSWER 3 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
- AN 2002:231615 BIOSIS
- DN PREV200200231615
- TI A new HpaII PCR-RFLP within the porcine **prolactin** receptor (PRLR) gene and study of its effect on **litter** size and number of teats.
- AU Putnova, L. (1); Knoll, A.; Dvorak, J.; Cepica, S.
- CS (1) Department of Genetics, Mendel University of Agriculture and Forestry, Zemedelska 1, 613 00, Brno: putnova@mendelu.cz Czech Republic
- SO Journal of Animal Breeding and Genetics, (February, 2002) Vol. 119, No. 1, pp. 57-63. http://www.blackwell.de/jbg.htm. print. ISSN: 0931-2668.
- DT Article
- LA English
- DNA polymorphism of the porcine prolactin receptor AΒ gene (PRLR) was investigated and used to study its effect on litter size and number of teats in pigs. By means of PRLR gene sequence homology in pig, human and other species, primers were designed for PCR amplification within 5' unknown (to date) part of the prolactin receptor gene in pigs. In this part of the gene, a new polymorphism with HpaII restriction endonuclease was detected. AluI polymorphism described before and our new HpaII polymorphism were used to study the associations with reproduction traits. The PCR restriction fragment length polymorphism (PCR-RFLP) method was used to genotype AluI and HpaII loci of the PRLR gene in line A with 83 sows of Landrace breed and in two lines (B and C) with 75 and 86 Large White sows, respectively. Statistical analysis of 1020 litters showed that AluI locus was associated with litter size mainly in Landrace and affected the first parities, while HpaII locus of the gene was associated with the same traits in Landrace and Large White pigs and mainly affected numbers of weaned of pigs. The magnitude of the effect varied by population with the effects exceeding two pigs per litter in Landrace line and 1 pig per litter in Large White populations.
- L3 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2002 ACS
- AN 2001:234767 CAPLUS

DN 135:90386 Study on polymorphism of estrogen receptor (ESR), TIprolactin receptor (PRLR) and relationship between polymorphism and litter size in large white sow Zhang, Shujun; Xiong, Yuanzhu; Deng, Changyan; Xia, Yu; Zheng, Rong; ΑU Jiang, Siwen; Xu, Jianxiang; Xiao, Senmu Wuhan Institute of Animal and Veterinary Science, Wuhan, 430065, Peop. CS Rep. China Huazhong Nongye Daxue Xuebao (2001), 20(1), 11-14 SO CODEN: HNDXEK; ISSN: 1000-2421 PΒ Huazhong Nongye Daxue DTJournal Chinese LA AΒ The polymorphism of PRLR and ESR gene of 88 Large White sows were studied by PCR-RFLPs, the relationship between polymorphism and growth traits were analyzed. The results showed that the polymorphism of the two loci were found. Different genotypes of PRLR had different effected on the size of litter by the order AB > BB; mean while, ESR by the order BB > AB L3 ANSWER 11 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2001:323124 BIOSIS ANPREV200100323124 DNGenes for reproductive traits in pigs: A review. TIOriginal Title: Geny zwiazane z cechami rozrodu swin.. Korwin-Kossakowska, Agnieszka (1) ΑU (1) Instytut Genetyki i Hodowli Zwierzat, Polska Akademia Nauk, CS Jastrzebiec, 05-552, Wolka Kosowska Poland Prace i Materialy Zootechniczne, (2000) No. 57, pp. 25-37. print. SO ISSN: 0137-1649. DTGeneral Review LΑ Polish \mathtt{SL} English; Polish AΒ Economic efficiency of pig production is greatly influenced by litter size. Ovulation rate (OR) and uterine capacity (UC) are good markers for litter size in pigs. Unfortunately, both traits are of low heritability. For marker-assisted selection programme it is of special importance to find effective markers, especially in case of sex-limited and low-heritable traits. There are two possibilities to identify such markers: 1. Genome analysis supported by statistical analysis of linkage between genetic marker and quantitative trait (genomic scan or identification of individual candidate genes). 2. Analysis of relationship between gene polymorphism and quantitative trait performance. At present, the following genes affecting reproductive traits are investigated: ESR (estrogene receptor gene), FSHB (follicle stimulating hormone beta-subunit gene), PRL (prolactin gene), PRLR (prolactin receptor gene), LEP (leptin gene), LEPR (leptin receptor gene), as well as recently proposed: RARG (retinoic acid receptor gamma gene), MTNR1A (melatonine receptor gene 1a) and RBP4 (retinol-binding protein 4 gene) expressed during critical period of pregnancy in pigs. ANSWER 12 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. L3 2001:195518 BIOSIS ANPREV200100195518 DNTIEffect of prolactin receptor (PRLR) gene polymorphism on litter size and placental traits in gilts. ΑU van Rens, B. T. T. M. (1); van der Lende, T. (1) CS (1) Animal Breeding and Genetics Group, WIAS, Wageningen University, 6700 AH, Wageningen Netherlands Journal of Reproduction and Fertility Abstract Series, (December, 2000) SO

No. 26, pp. 12-13. print. Meeting Info.: Society for the Study of Fertility Utrecht, Netherlands December, 2000 Society for the Study of Fertility . ISSN: 0954-0725. DTConference LA English SLEnglish ANSWER 13 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. T.3 ΑN 1999:456073 BIOSIS DN PREV199900456073 ΤI Prolactin receptor gene as a genetic marker for increased litter size in pigs. ΑU Rothschild, Max F. (1); Vincent, Amy L.; Tuggle, Christopher K. CS (1) Iowa State University Extension to Agriculture and Natural Resources, Ames, IA USA ASSIGNEE: Iowa State University Research Foundation, Inc. US 5935784 Aug. 10, 1999 PΤ Official Gazette of the United States Patent and Trademark Office Patents, (Aug. 10, 1999) Vol. 1225, No. 2, pp. NO PAGINATION. ISSN: 0098-1133. DTPatent English LA L3ANSWER 14 OF 21 CAPLUS COPYRIGHT 2002 ACS 1998:89383 CAPLUS AN128:163639 DN TIProlactin receptor gene AluI polymorphism as a genetic marker for increased litter size in pigs Rothschild, Max F.; Vincent, Amy L.; Tuggle, Christopher K. IN PΑ Iowa State University Research Foundation, Inc., USA PCT Int. Appl., 34 pp. SO CODEN: PIXXD2 DTPatent LΑ English FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE ____ _____ WO 9803682 Al 19980129 РΤ WO 1997-US11508 19970630 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG US 5935784 19990810 US 1997-812208 \mathbf{A} 19970306 AU 9735132 A1 19980210 AU 1997-35132 19970630 AU 727542 20001214 В2 CN 1230227 19990929 CN 1997-197746 19970630 Α EP 958376 EP 1997-931521 Α1 19991124 19970630 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI BR 1997-10875 19970630 BR 9710875 20000111 Α JP 2001509006 T220010710 JP 1998-506950 19970630 US 5939264 US 1997-896365 Α 19990817 19970718 PRAI US 1996-22180P P 19960719 US 1996-742805 Α 19961101 US 1997-812208 Α 19970306 WO 1997-US11508 W 19970630 Disclosed herein are genetic markers for pig litter size,

methods for identifying such markers, and methods of screening pigs to det. those more likely to produce larger litters and preferably selecting those pigs for future breeding purposes. The markers are based upon the presence or absence of certain polymorphisms in the pig prolactin receptor gene coding region. A marker is a restriction fragment length polymorphism (RFLP) for AluI restriction endonuclease in the pig prolactin receptor gene. The RFLP polymorphism is detected by PCR amplification without any probe. Kits for evaluating a sample of pig DNA for gene markers of litter size are also claimed. The kit contains a set of oligonucleotide primers capable of amplifying a fragment of the pig prolactin receptor gene contg. the AluI RFLP.

- L3 ANSWER 15 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
- AN 1999:135354 BIOSIS
- DN PREV199900135354
- TI A mutation in the **prolactin receptor** gene is associated with increased **litter** size in pigs.
- AU Rothschild, M. F. (1); Vincent, A. L. (1); Tuggle, C. K. (1); Evans, G.; Short, T. H.; Southwood, O. I.; Wales, R.; Plastow, G. S.
- CS (1) Dep. Anim. Sci., Iowa State Univ., Ames, IA 50011 USA
- SO Animal Genetics, (Dec., 1998) Vol. 29, No. SUPPL. 1, pp. 69.
 Meeting Info.: 26th International Conference on Animal Genetics Auckland,
 New Zealand August 9-14, 1998
 ISSN: 0268-9146.
- DT Conference
- LA English
- => d 1-3, 10-15 ti so
- L3 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2002 ACS
- TI **Prolactin receptor** gene polymorphic markers for increased **litter** size in animals
- SO U.S. Pat. Appl. Publ., 24 pp., Cont.-in-part of U.S. Ser. No. 274,655, abandoned.

 CODEN: USXXCO
- L3 ANSWER 2 OF 21 MEDLINE
- DUPLICATE 1
- TI Litter size and piglet traits of gilts with different prolactin receptor genotypes.
- SO THERIOGENOLOGY, (2002 Jan 15) 57 (2) 883-93. Journal code: 0421510. ISSN: 0093-691X.
- L3 ANSWER 3 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2
- TI A new HpaII PCR-RFLP within the porcine prolactin receptor (PRLR) gene and study of its effect on litter size and number of teats.
- SO Journal of Animal Breeding and Genetics, (February, 2002) Vol. 119, No. 1, pp. 57-63. http://www.blackwell.de/jbg.htm. print. ISSN: 0931-2668.
- L3 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2002 ACS
- TI Study on polymorphism of estrogen receptor (ESR), prolactin receptor (PRLR) and relationship between polymorphism and litter size in large white sow
- SO Huazhong Nongye Daxue Xuebao (2001), 20(1), 11-14 CODEN: HNDXEK; ISSN: 1000-2421
- L3 ANSWER 11 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE

TI Genes for reproductive traits in pigs: A review.
Original Title: Geny zwiazane z cechami rozrodu swin..

SO Prace i Materialy Zootechniczne, (2000) No. 57, pp. 25-37. print. ISSN: 0137-1649.

- L3 ANSWER 12 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
- TI Effect of prolactin receptor (PRLR) gene polymorphism on litter size and placental traits in gilts.
- SO Journal of Reproduction and Fertility Abstract Series, (December, 2000) No. 26, pp. 12-13. print.

 Meeting Info.: Society for the Study of Fertility Utrecht, Netherlands December, 2000 Society for the Study of Fertility

 . ISSN: 0954-0725.
- L3 ANSWER 13 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
- TI **Prolactin receptor** gene as a genetic marker for increased **litter** size in pigs.
- Official Gazette of the United States Patent and Trademark Office Patents, (Aug. 10, 1999) Vol. 1225, No. 2, pp. NO PAGINATION. ISSN: 0098-1133.
- L3 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2002 ACS
- TI **Prolactin receptor** gene AluI polymorphism as a genetic marker for increased **litter** size in pigs
- SO PCT Int. Appl., 34 pp. CODEN: PIXXD2
- L3 ANSWER 15 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
- TI A mutation in the **prolactin receptor** gene is associated with increased **litter** size in pigs.
- SO Animal Genetics, (Dec., 1998) Vol. 29, No. SUPPL. 1, pp. 69.
 Meeting Info.: 26th International Conference on Animal Genetics Auckland,
 New Zealand August 9-14, 1998
 ISSN: 0268-9146.